

Abstract of the Disclosure

Provided is a method for preparing a Li-Mn-Ni oxide for a lithium secondary battery having a composition of
5 $\text{Li}[\text{Ni}_x\text{Li}_{(1/3-2x/3)}\text{Mn}_{(2/3-x/3)}\text{O}_2$ ($0.05 < x < 0.6$), including the steps of: a) preparing an aqueous solution by resolving lithium salt, manganese salt and nickel salt into distilled water; b) forming gel by heating the aqueous solution; c) preparing oxide powder by burning the gel; d) performing a first thermal
10 treatment on the oxide powder, and grinding the resultant; and e) performing a second thermal treatment on the resultant powder, and grinding the resultant. The technology of the present invention can prepare a Li-Mn-Ni oxide having a composition of $\text{Li}[\text{Ni}_x\text{Li}_{(1/3-2x/3)}\text{Mn}_{(2/3-x/3)}\text{O}_2$ ($0.05 < x < 0.6$) to be
15 used as a cathode material of a lithium secondary battery having a stable and excellent electrochemical characteristics.